FIG. 1

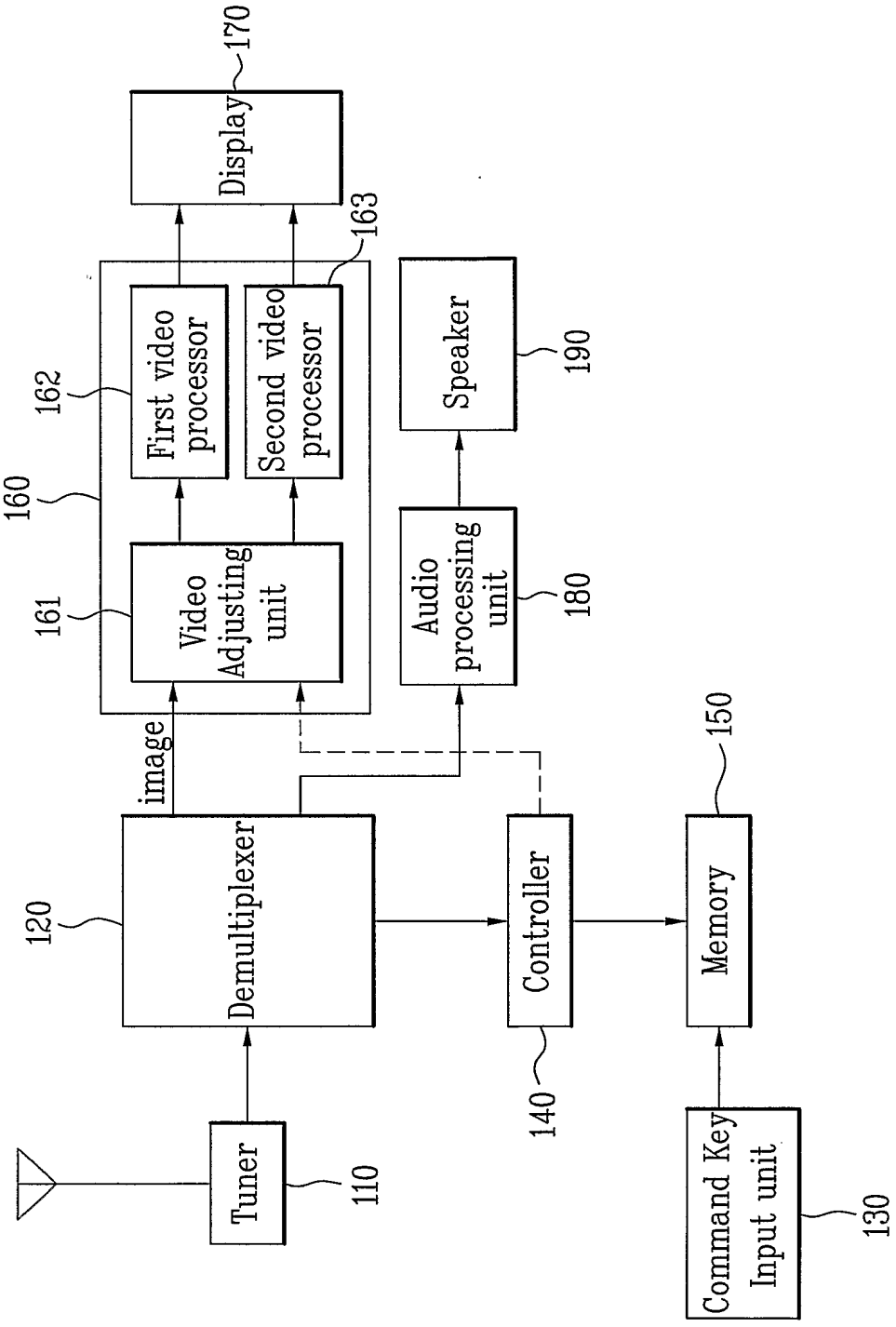

Display
170
163
First video processor
Second video processor
162
160
Video Adjusting unit
161
Speaker
190
Audio processing unit
180
image
Demultiplexer
120
Controller
140
Memory
150
Tuner
110
Command Key Input unit
130

FIG. 2

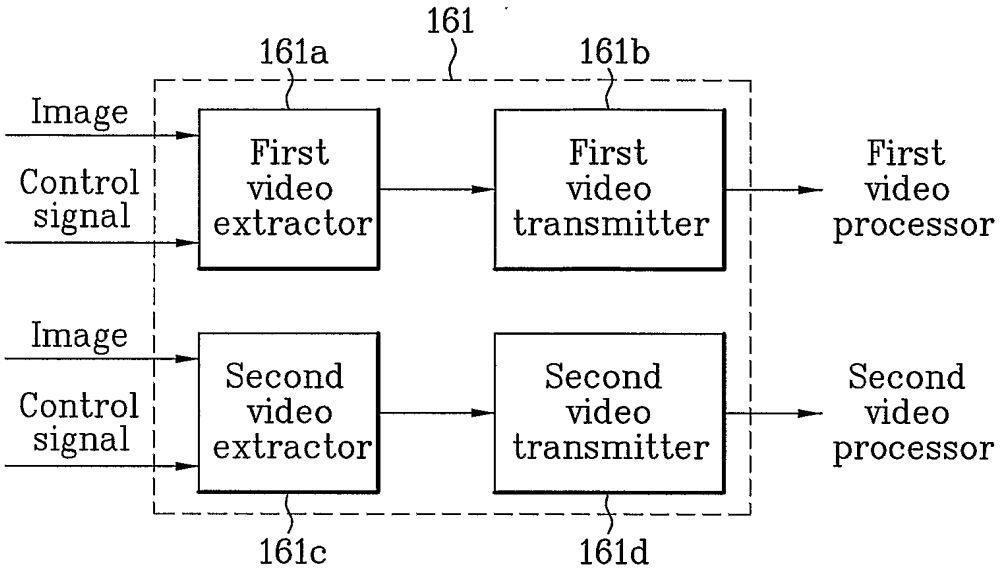

161
161a
161b
Image
Control signal
First video extractor
First video transmitter
First video processor
Image
Control signal
Second video extractor
Second video transmitter
Second video processor
161c
161d

FIG. 3

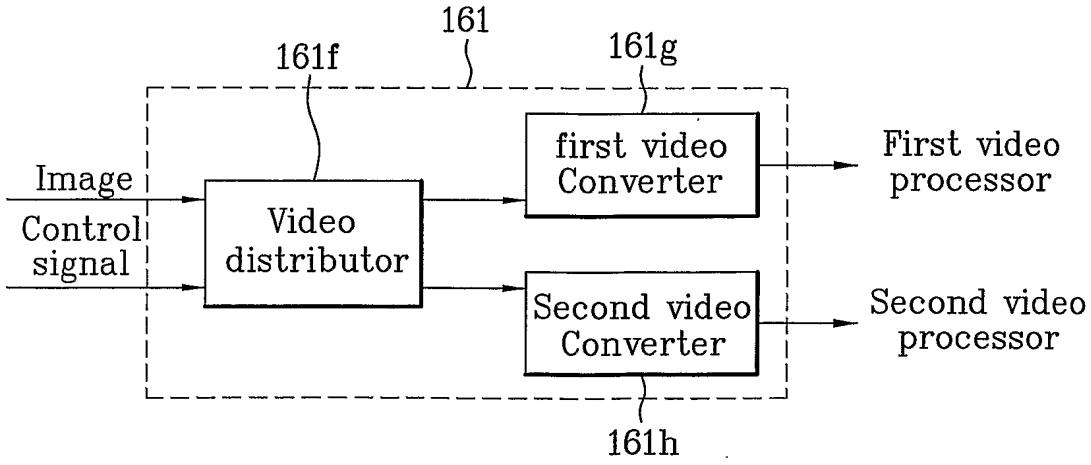

161
161f
161g
Image
Control signal
Video distributor
first video Converter
First video processor
Second video Converter
Second video processor
161h

FIG. 4

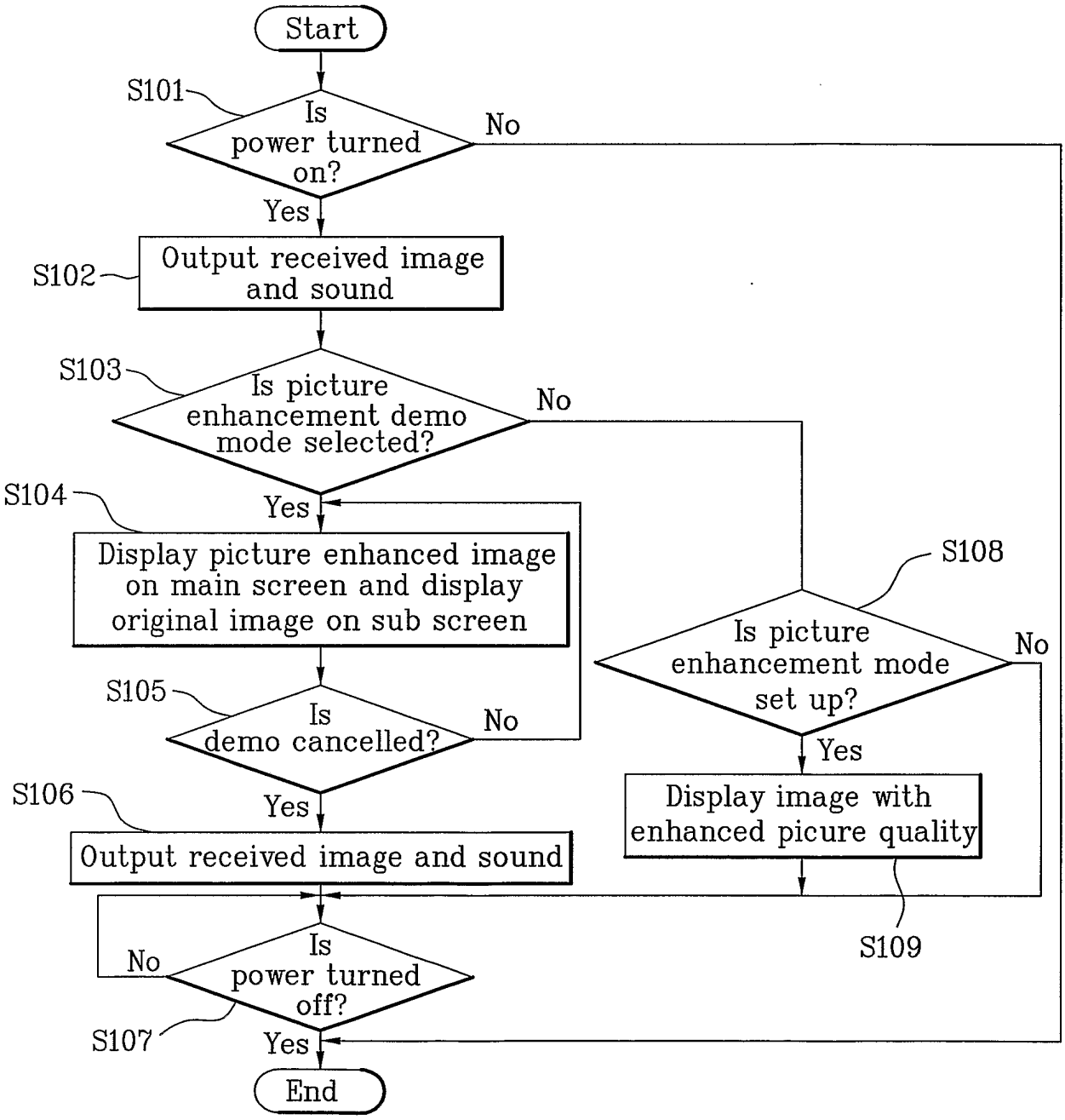

Start
S101
Is power turned on?
No
Yes
S102
Output received image and sound
S103
Is picture enhancement demo mode selected?
No
Yes
S104
Display picture enhanced image on main screen and display original image on sub screen
S105
Is demo cancelled?
No
Yes
S106
Output received image and sound
S108
Is picture enhancement mode set up?
No
Yes
Display image with enhanced picure quality
S109
No
Is power turned off?
S107
Yes
End

FIG. 5

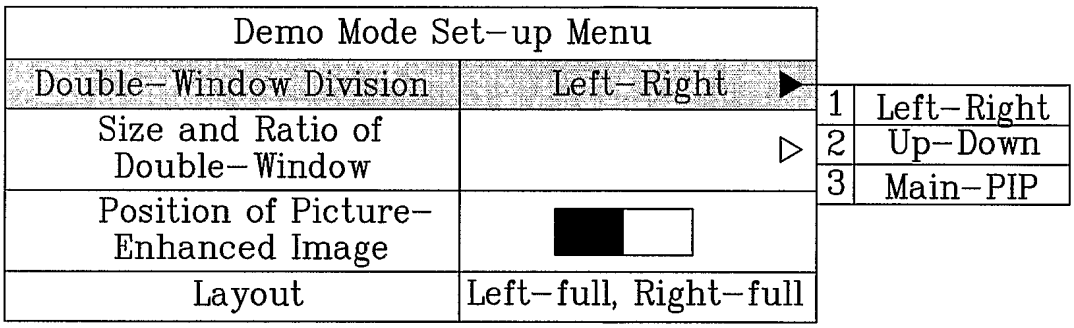

Demo Mode Set-up Menu
Double-Window Division
Left-Right
Size and Ratio of Double-Window
Position of Picture-Enhanced Image
Layout
Left-full, Right-full
1 Left-Right
2 Up-Down
3 Main-PIP

FIG. 6

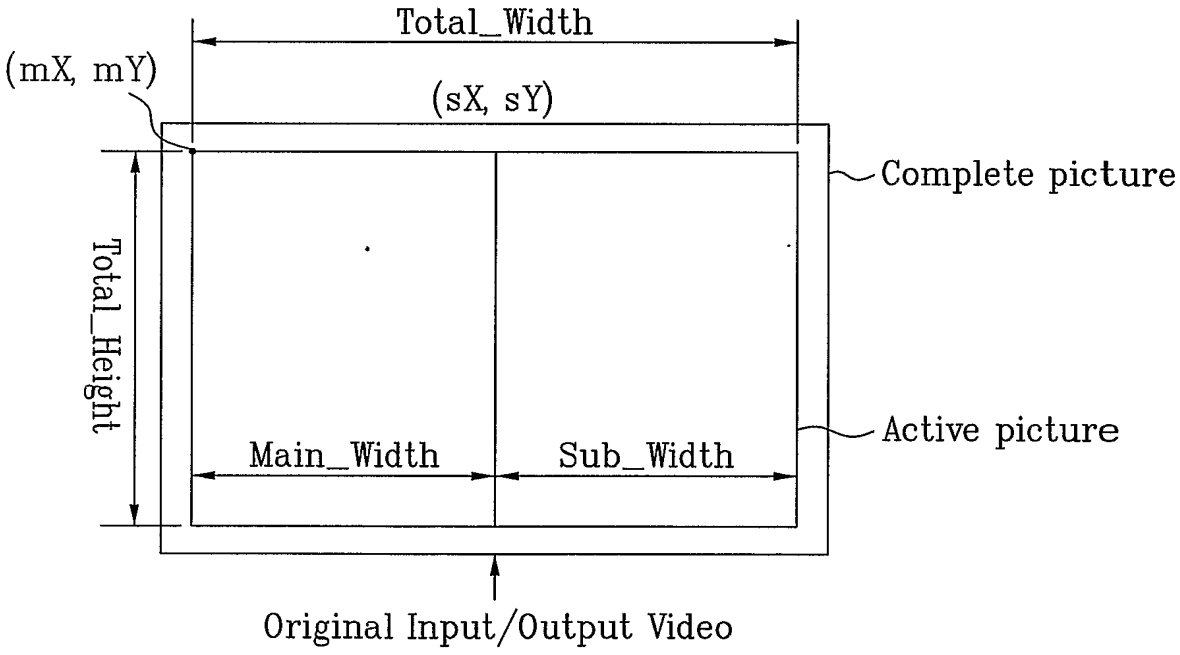

Total_Width
(mX, mY)
(sX, sY)
Complete picture
Total_Height
Active picture
Main_Width
Sub_Width
Original Input/Output Video

FIG. 7

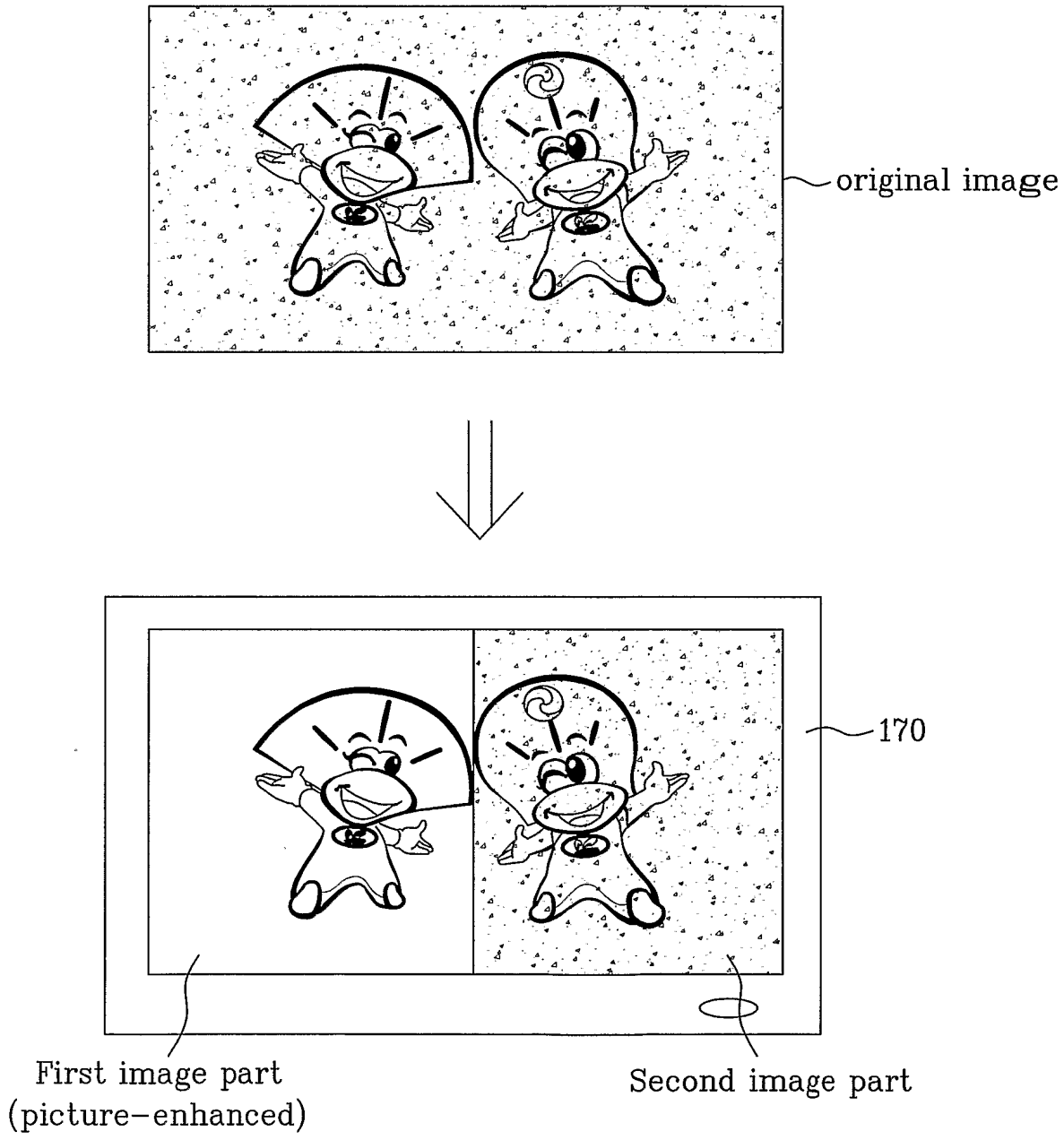
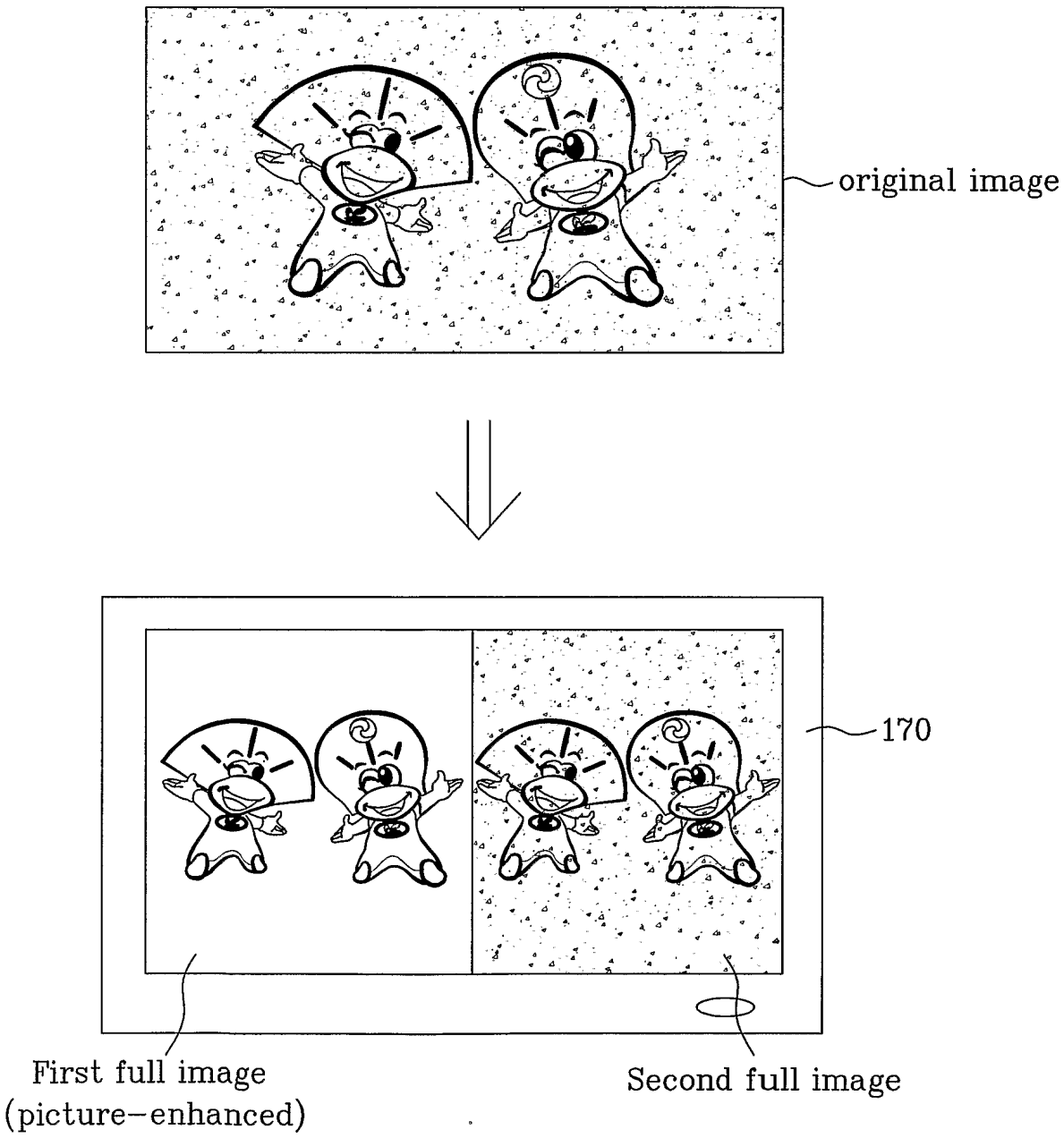

original image
170
First image part
(picture-enhanced)
Second image part

FIG. 8


original image
170
First full image
(picture-enhanced)
Second full image